

ABSTRACT OF THE DISCLOSURE

A battery (102) powers a wireless telephone's power amplifier (106) through a Switch Mode Power Supply (SMPS) (104). The SMPS has a capacity lower than the maximum power requirements of the amplifier. When a controller (116) senses that an amplifier power-requirement threshold has been exceeded, it closes a switch (114) parallel to the SMPS, allowing power to flow from the battery to the amplifier without passing through the SMPS. This architecture allows the use of a smaller SMPS, and eliminates SMPS-generated noise to the amplifier when the amplifier is least able to tolerate such noise, namely, under high power conditions.